WHAT IS CLAIMED IS:

1. A method for detecting an endpoint of an etch process, comprising the steps of:

implanting a dopant within a semiconductor film at a desired implant depth and concentration; and

chemically analyzing a concentration of the implanted dopant released from the semiconductor film during an etch process to determine an endpoint for the etch process.

2. the method of claim 1, wherein the implant depth is approximately equal to an etch distance.

3. The method of claim 1, wherein the endpoint of the etch process is determined based on a peak concentration of the implant dopant in an etch plasma.

4. A method for detecting an endpoint of an etch process, comprising the steps of:

implanting a dopant into a material at a reference depth;

detecting a concentration of the dopant in an etching environment as the material is etched; and

determining that the material has been etched to the reference depth when peak concentration of the dopant is detected.

5. The method of claim 4, wherein the reference depth is approximately the same as a desired etch distance.

6. The method of claim 4, wherein the reference depth is less than a desired etch distance.

7. The method of claim 4, wherein the step of detecting comprises detecting the concentration of compound formed from the dopant during the etching process.

8. The method of claim 4, wherein the step of detecting comprises mass spectrometry.

9. The method of claim 4, wherein the etching environment comprises a plasma.

10. The method of claim 4, wherein the dopant comprises one of N, H, O, B, P, As, and S.

11. The method of claim 4, wherein the etch process comprises a wet etch.

12. The method of claim 4, wherein the etch process comprises a dry etch.